

20734

S/020/61/137/002/005/020  
B104/B212

The principle of the non-local ...

equivalent and the local methods have a small effectivity. It is assumed that the first trigger operation has brought the system into a point  $A_0$  (Fig. 1), then, in a distance of  $X_0$ , which is larger than that of the first step, a point  $X_1$  is chosen. A new trigger operation is carried out from point  $X_1$ , which brings the system into the state  $A_1$ . After this, the so-called "dip" step is performed:  $A_0$  and  $A_1$  are connected with a straight line. Point  $X_2$  is chosen on this line and starting from it the gradient  $A_2$  will be found with a trigger operation. In this manner the minimum of  $\Phi$  is established. The method described is very complicated if there are many variables and the authors suggest a method where the variables  $x_i$  are described by initial probabilities  $p_i$ . Using those, several directions are selected and calculations are made with partial gradients. N. A. Bernshteyn is mentioned. The authors thank M. A. Yevgrafov, L. N. Ivanova, and I. I. Pyatetskiy-Shapiro for valuable

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S/020/61/137/002/005/020

B104/B212

The principle of the non-local ...

discussions. There are 1 figure and 7 references: 6 Soviet-bloc and 1 non-Soviet-bloc.

SUBMITTED: December 14, 1960

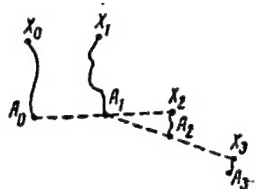


Рис. 1

Card 5/5

255L7

S/020/61/119/004/001/020  
B104/B215

16.8000 (112, 1132, 1344)

AUTHOR: Tsetlin, M. L.

TITLE: Some problems on the behavior of finite automatic devices

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 139, no. 4, 1961, 830-833

TEXT: The author studied the behavior of finite automatic devices in media acting at random on finite automatic devices. On the condition that a medium "punishes" the automatic device with a probability defined for each of its operations, it is shown that the functioning of this device may be described with the aid of a Markov circuit. Supposing that 1) the input variable  $S(t)$  ( $t = 1, 2, \dots$ ) of the automatic device assumes only two values (0 and 1), 2) the transitions from one state to another are determined by the so-called simple matrix  $A(s) = \|a_{ik}(s)\|$ , that is, if at the moment  $A$  the automatic device is in a state  $q_i$ , it will pass over to a state at the moment  $A + 1$ , for which  $a_{ik}(S(t+1)) = 1$ , 3) the output variable  $f(t)$  can assume only the discrete values 0 and 1, and that the

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S/020/61, 139/001/001/020

B104/E218

Some problems on the behavior of ...

automatic device operates in a stationary random medium  $C = C(t_1, t_2)$ , i.e., the input variable is connected with the operation of the automatic device in such a manner that the operation  $f$  carried out by the automatic device at the moment  $A$  produces the quantity  $s=1$  at the moment  $t+1$  with a probability  $p_f$  and the quantity  $s=0$  with a probability  $q_f = 1 - p_f$ ;

4)  $f(q_j) = 0$  for  $j=1, \dots, n$  and  $f(q_j)$  for  $j = n+1, \dots, 2n$ , then

$$P_{ik} = \begin{cases} p_0 a_{ik}(1) + q_0 a_{ik}(0) & \text{for } i = 1, \dots, n \\ p_1 a_{ik}(1) + q_1 a_{ik}(0) & \text{for } i = n+1, \dots, 2n \end{cases} \quad (2)$$

will be valid for the probability  $P_{ik}$  of a transition from the  $i$ -th to the  $j$ -th state. The  $p_{ik}$  matrix is stochastic owing to the so-called simplicity of the  $a_{ik}$  matrix, so that the functioning of this automatic device in a stationary random medium is described by a stationary Markov circuit. Apart from unessential restrictions it may be assumed in general that this

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S/020/61/139/004/007/025

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Some problems on the behavior of ...

circuit is an ergodic one, which implies that the states of the automatic device exhibit limiting probabilities which do not depend on the initial state. To give an example, the automatic device  $L_n$  (an automatic device operating on linear tactics) is dealt with. This automatic device has  $2n$  states. A graph of its states is shown in Fig. 1. The matrix elements of the states of the device are determined from

$$\begin{aligned} a_{ik}(0) &= 1 \text{ при } i = 2, 3, \dots, n, n+2, \dots, 2n \text{ и } k = i-1; \\ a_{ii}(0) &= a_{n+1, n+1}(0) = 1; \\ a_{ik}(1) &= 1 \text{ при } i = 1, 2, \dots, n-1, n+1, \dots, 2n-1 \text{ и } k = i+1; \\ a_{n, 2n}(1) &= a_{2n, n}(1) = 1. \end{aligned} \quad (A).$$

The elements that have here been disregarded are zero. The matrix  $P$  can easily be determined from (2) which is used to calculate the limiting probabilities of the states.

$$M(L_n, C) = \frac{p_0 p_1^n \frac{p_0^n - q_0^n}{p_0 - q_0} + p_1 p_0^n \frac{p_1^n - q_1^n}{p_1 - q_1}}{p_1^n \frac{p_0^n - q_0^n}{p_0 - q_0} + p_0^n \frac{p_1^n - q_1^n}{p_1 - q_1}}. \quad (4)$$

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S/020/61/139/004/007/025  
B104/B213

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is obtained for the expectation value of a "punishment".  $M(L_n, C)$  is a decreasing function of the capacity  $n$  of the memory, and with  $M_{\min} \leq 1/2$  one finds  $\lim_{n \rightarrow \infty} M(L_n, C) = M_{\min}$ . In addition, the behavior of an automatic device operating on linear tactics in a medium is studied, the time dependence of the probability properties being determined by a Markov circuit. The medium is described by  $K = K(C_1, C_2, \delta)$ , where  $C_1$  and  $C_2$  represent two states of the Markov circuit. An expression is derived for the expectation value  $M(L_n, K)$  of a "punishment", which reveals that this expectation value reaches a minimum at a certain finite value  $n = n_0$  of the capacity of the memory. The existence of this minimum can be attributed to the fact that the information on the state of the medium will be insufficiently evaluated if the volume of the memory is too small. In case of  $n$  being too great, the mean is taken of the statistical properties of both states of the composite medium. It is then possible to construct an automatic device operating on linear tactics, which exhibits the most adequate behavior in a

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Some problems on the behavior of ...

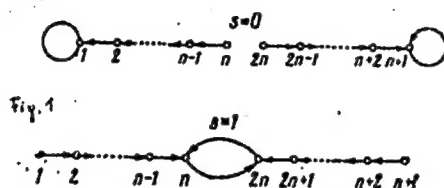
1961  
S/020/61/139/004/007/025  
B104/B213

given composite medium. The author thanks I. M. Gel'fand, D. S. Lebedev, and O. B. Lupanov for interest and attention, as well as B. D. Yefremov for his assistance in carrying out the computations. V. L. Buylov is mentioned. There are 2 figures, 1 table, and 2 Soviet-bloc references.

ASSOCIATION: Matematicheskii institut im. V. A. Steklova Akademii nauk SSSR (Institute of Mathematics imeni V. A. Steklov of the Academy of Sciences USSR)

PRESENTED: March 22, 1961, by I. G. Petrovskiy, Academician

SUBMITTED: March 16, 1961



Card 5/5

GEL'FAND, I.M.; GURFINKEL', V.S.; TSETLIN, M.L.

Some considerations on the tactics of the formation of  
movements. Dokl. AN SSSR 139 no.5:1250-1253 Aug '61.

(MIRA 14:8)

1. Institut biologicheskoy fiziki AN SSSR. 2. Chlen-  
korrespondent AN SSSR (for Gel'fand).

(MOVEMENT, PSYCHOLOGY OF)



GAAZE-RAPOPORT, Modest Georgiyevich; TSETLIN, M.L., red.; BIRYUKOV,  
B.Y., red.; AKSEL'ROD, I.Sh., tekhn.red.

[Automatons and living organisms; operating models that behave  
like living organisms] Avtomaty i zhivye organizmy; modeliro-  
vanie povedeniia zhivyykh organizmov. Moskva, Gos.izd-vo fiziko-  
matem.lit-ry, 1961. 224 p. (MIRA 14:4)

(Automata)

(Physiology)

TSETLIN, M. L.

"On the Behavior of Limited Automatic Devices Under Random Conditions."

Report submitted for the Symposium on Principles in the Design of  
Self-Learning Systems, Kiev Ukr SSR, 5-9 May 1961

16.8000 (1031, 1132, 1329)

33631  
S/042/62/017/001/001/005  
B112/B108

AUTHORS: Gel'fand, I. M., and Tsetlin, M. L.

TITLE: Some methods of the control of closed systems

PERIODICAL: Uspekhi matematicheskikh nauk, v. 17, no. 1 (103), 1962, 3-25

TEXT: The authors investigate closed controlling systems which have a certain finality. The analysis of scattering phase shifts (proton-proton scattering) and the construction of physiological motions (human motion) are considered as examples. Such problems are reduced to automatically finding the minimum of a function  $F(x_1, \dots, x_n, y_1, \dots, y_n)$ , where the "hidden" parameters  $y_1, \dots, y_n$  depend on time  $t$  and on the "working" parameters  $x_1, \dots, x_n$ . The function  $\phi(x_1, \dots, x_n, t) = F(x_1, \dots, x_n, y_1, \dots, y_n)$  is said to be the appraisable function of the system considered. Essentially, there are three methods of automatically finding such arguments  $x$  which correspond to sufficiently small values of  $\phi$ : 1. Blind seeking. 2. Local seeking. 3. Non-local seeking. As a method of non-local seeking, the

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S/042/62/017/001/001/005  
B112/B108

Some methods of the control...

authors present the so called method of "gorges". This method is schematically described in Fig. 1. The straight lines  $A_i A_{i+1}$  indicate the "gorges". P. K. Anokhin and G. V. Gershun' are mentioned. N. A. Bernshteyn, V. S. Gurfinkel', L. N. Ivanov, and I. I. Shapiro-Pyatetskiy are thanked for assistance. A. A. Fel'dbaum (Avtomatika i telemekhanika 21, No. 9 (1960); No. 11 (1960); Vychislitel'nyye ustroystva v avtomaticheskikh sistemakh - Computational constructions in automatic systems, M., Fizmatgiz, 1959; Avtomatika i telemekhanika 17, No. 9 (1956); 19, No. 8 (1958)), N. A. Bernshteyn, (O postroyenii dvizheniy - On the construction of motions, M., Medgiz, 1947), I. M. Gel'fand, V. S. Gurfinkel', M. L. Tsetlin (DAN 139, No. 5 (1961)), V. S. Gurfinkel' (AMN, 1961; Tret'ya nauchnaya sessiya TsNIIPP - Third scientific session of TsNIIPP, M., 1953; Vtoraya nauchnaya sessiya TsNIIPP - Second scientific session of TsNIIPP, M., 1952) are referred to. There are 8 figures and 35 references: 28 Soviet and 7 non-Soviet. The four most recent references to English-language publications read as follows: E. R. Caianiello, Outline of a theory of thought processes and thinking machines, Naples, 1960, Preprint; S. Ulam, A collection of mathematical problems, New York - London, 1960; R. C. Stabler, E. L. Lomon,

Card 2/3

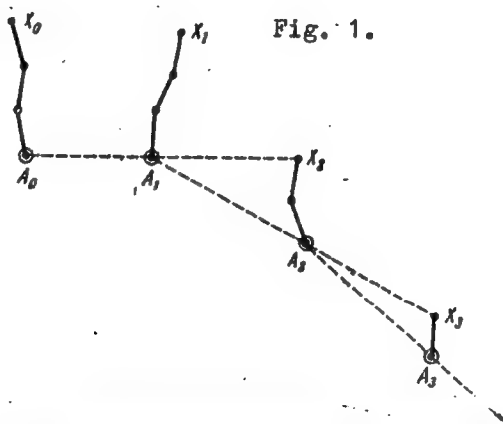
33631

Some methods of the control...

S/042/62/017/001/001/005  
B112/B108

Proton-proton scattering phase shifts at 150 Mev, Nuovo cimento 15, No. 2 (1960); H. P. Stapp, T. I. Ipsilantis, N. Metropolis, Phase-shifts analysis of 310 Mev proton-proton scattering experiments, Phys. Rev. 105, No. 1 (1957).

SUBMITTED: July 20, 1961



Card 3/3

GEL'FAND, I.M.; GURFINKEL', V.S.; KOTS, Ya.M.; TSETLIN, M.L.; SHIK, M.L.

Synchronization of motor units and its model representation.  
Biofizika 8 no.4:475-487 '63.

(MIRA 17:10)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.

L 18406-63

EWT(d)/FCC(w)/BDS AFFTC/ASD/ESD-3/RADC/IJP(C)

ACCESSION NR: AP3003744

S/0103/63/024/007/0975/0987

AUTHOR: Krylov, V. Yu. (Moscow); Tsetlin, M. L. (Moscow) 58

TITLE: Automata games 16

SOURCE: Avtomatika i telemekhanika, v. 24, no. 7, 1963, 975-987

TOPIC TAGS: game, automaton

ABSTRACT: Two finite automata without a priori information about the game are selecting their strategies in the course of playing the game. Hands (games) are repeated many times, and each of them means a unit loss or gain for a given automaton. Thus, the strategy of each automaton is based only on his last score. Such a type of game is described by the Markov's finite chain; final probabilities of winning are determined for the ergodic-game class. Further, a two-automata zero-sum game is defined. The automaton plays with an adversary who has selected a mixed strategy. A linear-tactics automaton can maximize its chances

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ACCESSION NR: AP3003744

to win; if his opponent uses the optimum strategy, it can still get the Neumann's pure value. It is assumed that both automata have expedient behavior. Finally, a zero-sum game is considered between two automata having an asymptotically optimum behavior in steady-state random media. Some experimentation with a computer in connection with the latter type of game is mentioned. Orig. art. has: 3 figures, 49 formulas, and 1 table.

ASSOCIATION: none

SUBMITTED: 04Nov62

DATE ACQ: 02Aug63

ENCL: 00

SUB CODE: IE

NO REF SOV: 006

OTHER: 004

Card 2/2



S/020/63/149/001/005/023  
B112/B186

AUTHOR: Tsetlin, M. L.

TITLE: Some remarks on a game played by a finite automation against an opponent using a mixed strategy

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 149, no. 1, 1963, 52 - 53

TEXT: The game under consideration is defined by a matrix  $A = \|a_{ik}\|$ ,  $i = 1, \dots, M$ ,  $k = 1, \dots, N$ . One of the players is a finite automation  $L_{Mn, M}$  with linear strategy (cf. M. L. Tsetlin, DAN, 139, No. 4 (1961); Avtomatika i telemekhanika, 22, No. 10 (1961)). The mathematical expectation value  $W(n)$  for a victory of the automation  $L_{Mn, M}$  is derived to be

$$W(n) = \sum_{i=1}^M (1 - \lambda_i^n) / \sum_{i=1}^M ((1 - \lambda_i^n) / a_i), \text{ where } a_i = \sum_{k=1}^M a_{ik} x_k, \lambda_i = p_i / q_i,$$

$$p_i = \sum_{k=1}^N p_{ik} x_k, q_i = \sum_{k=1}^N q_{ik} x_k, p_{ik} = (1 + a_{ik})/2, q_{ik} = (1 - a_{ik})/2.$$

Card 1/2

S/020/63/149/002/007/028  
B112/B180

AUTHORS: Tsetlin, M. L., Krylov, V. Yu.

TITLE: Examples of games played by robots

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 149, no. 2, 1963, 284-287

TEXT: The behavior of players in a game is considered, the conditions of which are not known to the players. It is assumed that the game is repeated a certain number of times. Simplest examples for playing a zero-sum game with linear strategy are considered. For this case, the mathematical expectation value is calculated and shown to be similar to that of the von Neumann game.

PRESENTED: October 16, 1962, by M. V. Kel'dysh, Academician

SUBMITTED: October 4, 1962

Card 1/1

GEL'FAND, I.M.; PYATETSKIY-SHAPIRO, I.I.; TSETLIN, M.L.

Certain ~~classes~~ of games and robot games. Dokl. AN SSSR 152  
no.4:845-848 O '63. (MIRA 16:11)

1. Chlen-korrespondent AN SSSR (for Gel'fand).

GEL'FAND, I.M.; GUREJNICH, V.L.; KOTS, Ya.M.; KUPCHUK, V.I.;  
ROETLIN, M.L.; SHIK, M.L.

Study of postural activity. Biophysika 9 no.6:710-717 '64.  
(MIRA 18:7)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.

GINZBURG, S.L. (Moskva); KRYLOV, V.Yu. (Moskva); TSETLIN, M.L. (Moskva)

Example of a game of many identical automats. Avtom. i telem.  
25 no.5:668-672 My '64. (MIRA 17:9)

A. I. BRYZGALOV, V. I. GEL'FAND, I. M. GEL'FAND, I. M. GEL'FAND

AUTHOR: Bryzgalov, V. I. (Moscow), Gel'fand, I. M. (Moscow),  
Gel'fand, I. M. (Moscow), Gel'fand, I. M. (Moscow)

FILE: Uniformity of distribution of the digital-computer simulation

SOURCE: *Matematika*, 1974, v. 25, no. 11, 1974, 1572-1580

TOPIC TAGS: MATHEMATICS; COMPUTERS

ABSTRACT: The problem of the uniformity of the distribution of the digital-computer simulation of the random process is considered. The problem is solved for the case of the random process with a finite number of states. The results of the numerical simulation are presented. The results of the numerical simulation are presented. The results of the numerical simulation are presented.

Card 1/2



VARSHAVSKIY, V.I.; MELESHINA, M.V.; TSETLIN, M.L.

Automata behavior in periodical random media and the synchronization  
problem in the presence of noise. Probl. pered. inform. 1 no.1:65-71  
'65. (MIRA 18:7)



GINZBURG, S.S.; TSEPTIN, M.I.

Some examples of modeling the collective behavior of ants.  
Probl. pared. inform. 1 no.2:54-62 '66. (MIRA 18:7)

L 40898-66 ENT(d)/T/EMP(1) IJP(c) JXT(BF)  
 ACC NR: AP6007532 SOURCE CODE: UR/0406/65/001/002/0054/0062  
 42  
 B

AUTHOR: Ginzburg, S. L.; Tsetlin, M. L.

ORG: none

TITLE: Some examples of the simulation of the group behavior of automata

SOURCE: Problemy peredachi informatsii, v. 1, no. 2, 1965, 54-62

TOPIC TAGS: game theory, automaton, computer theory

ABSTRACT: Earlier, the authors and V. Yu. Krylov (Ob odnom primere igry mnogikh odinakovykh avtomatov. Avtomatika i telemekhanika, 1964, XXV, 5, 668-672) described a symmetrical game by a large number of identical automata ("assignment game") and showed that a group of automata, unified in the participation of such a game, will behave in a suitable fashion in the sense that the behavior of automata lacking a priori information on the conditions of the game is analogous to that of players who have a prior knowledge of the conditions of the game and that they are able to select the most effective line of conduct. In the present article, the authors study the reliability of this collective behavior and describe an example of the use of assignment game simulation methods to solve the so-called computer equipment distribution problem in one of several possible simple formulations. The game

UDC: 62-507

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L 40898-66

ACC NR: AP6007532

considered is assignment with common class, in which the automaton are distributed in terms of strategies so as to achieve maximum overall gain. Automaton failure is considered a possibility. The effect of memory changes in an automaton and the number of automaton taking part in the game on the mean gain per automaton is analyzed in two examples. The method proposed involves the consideration of the computer equipment distribution problem as one of the organization of the collective behavior of the solving devices, with an attempt to organize their interaction in order that the suitable behavior of individual devices lead to optimal behavior of the entire problem-solving system. Orig. art. has: 7 tables and 10 formulas.

SUB CODE: 09,12/ SUBM DATE: 04 Nov 64 ORIG REF: 002

Card

2/2

MLP

L 04905-67 EWT(d)/EWP(1) IJP(c) GD

ACC NR: AT6022685

SOURCE CODE: UR/0000/66/000/000/0165/0169

AUTHOR: Tsetlin, M. L.; Ginzburg, S. L.; Krylov, V. Yu.

ORG: none

TITLE: Example of the collective behavior of finite automata

SOURCE: Moscow, Institut avtomatiki i telemekhaniki. Samoobuchayushchiyesya avtomaticheskkiye sistemy (Self-instructing automatic systems). Moscow, Izd-vo Nauka, 1966, 165-169

TOPIC TAGS: finite automaton, game theory, computer simulation

ABSTRACT: The article contains a description of an example of computer simulation of an "assignment game" by many automata. A simple example of a symmetrical game permitting a natural interpretation is selected. Resultant conditions and equilibrium points are studied, and the behavior in this game of automata interrelated by the "common pool" procedure is studied. The authors show that automata invested with purposeful behavior under stationary random conditions will likewise behave "reasonably" in this case as well (provided that their memory capacity is sufficient). Three strategy examples are analyzed and win factors are derived for different memories and for situations with and without the "common pool" concept.

SUB CODE: 09,12/ SUBM DATE: 02Mar66/ ORIG REF: 002/ OTH REF: 002  
Card 1/1

L 56492-65  
ACCESSION NR: AP5017800

UR/0286/65/000/011/0031/0031  
631.859.12.002.2

AUTHOR: Karatayev, I. I.; Mel'nik, B. D.; Repenkova, T. G.; Sviridova, A. G.;  
Doktorov, N. I.; Nazarov, G. N. Raygorodskiy, I. M.; Vasil'yev, B. T.; Bystrov,  
M. V.; Babaryka, I. F.; Kuzyak, F. A.; Fel'dman, M. V.; Soverchenko, D. A.;  
Buslakova, L. P.; Toroptseva, N. P.; Lyubimov, S. V.; Ul'yanov, A. T.; Andreev,  
V. V.; Sobchuk, Yu. I.; Tsetlina, M. M.; Andreyev, V. V.; Kramer, G. L.

TITLE: A method for producing phosphoro-potassium fertilizers. Class 16, No. 171-  
409

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 11, 1965, 31

TOPIC TAGS: fertilizer, phosphate, potassium

ABSTRACT: This Author's Certificate introduces a method for producing phosphoro-  
potassium fertilizers using cement dust (waste from cement production) as the potas-  
sium raw material. The process of adding potassium to the product is simplified  
and evaporation is prevented by using a 20% excess of an acid which directly neutra-  
lizes the cement dust for breaking down the phosphate raw material.

Card 1/2

L 56492-65  
ACCESSION NR: AP5017800

ASSOCIATION: none

SUBMITTED: 29Mar62

NO REF SOV: 000

ENCL: 00

SUB CODE: GC, LS

OTHER: 000

*2/2*  
2/2

POPADEYKIN, Vitaliy Ivanovich; TSETLIN, M.N., red.; GALAKTIONOVA, Ye.N.,  
tekhn.red.

[Moscow - Leningrad; road guide] Moskva - Leningrad; putevoditel'  
po avtomobil'noi doroge. Moskva, Nauchno-tekhn.izd-vo M-va avto-  
mobil'nogo transp. i shosseinykh dorog RSFSR, 1960. 145 p.  
(MIRA 13:7)

(Automobiles--Road guides)

TSETLIN, M. N., Docent

Pharmacy - Study and Teaching

Teaching Latin in pharmaceutical institutes. Apt. delo no. 3, 1952.

Monthly List of Russian Accessions. Library of Congress. November, 1952.

UNCLASSIFIED.



TSETLIN, M. N., Docent

Pharmacy - Terminology

Problem of terminology; comments on Prof. Ye. Ya. Abol's article. Docent M. N. TSetlin.  
Apt. delo no. 4, 1952.

Monthly List of Russian Accessions. Library of Congress. November, 1952. UNCLASSIFIED

TSETLIN, M.S., inzh.

The eastern region of the Donets Basin as an additional source  
of coking coals for the metallurgy of the South. Ugol.prom.  
no.5:74-75 S-O '62. (MIRA 15:11)  
(Donets Basin--Coal)

| PROCESSES AND PROPERTIES INDEX  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26  |  |  |  |  |  |  |  |  |  |  |  |  | 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <p>Induction furnace for heat-treating wire. V.G. 5<br/> <u>Exlin</u>, Russ. 43,008, May 31, 1935. Construction de-<br/>           tails.</p>   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <p>ASM-A.S.A. METALLURGICAL LITERATURE CLASSIFICATION</p> <table border="1"> <thead> <tr> <th colspan="13">1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26</th> <th colspan="13">27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45</th> </tr> </thead> <tbody> <tr> <td colspan="13">1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26</td> <td colspan="13">27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45</td> </tr> </tbody> </table> |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 |  |  |  |  |  |  |  |  |  |  |  |  | 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 |  |  |  |  |  |  |  |  |  |  |  |  | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 |  |  |  |  |  |  |  |  |  |  |  |  | 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26  |  |  |  |  |  |  |  |  |  |  |  |  | 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26  |  |  |  |  |  |  |  |  |  |  |  |  | 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

TSETLIN, V.G., inzhener.

Effectiveness of trolley car transportation. Mekh.trud.rab. 7 no.9:44-45  
S '53. (MLRA 6:9)  
(Electric railroads--Freight)

ZVONKOVA, Ye.N.; TSETLIN, V.I.; SARYCHEVA, I.K.; PREOBRAZHENSKIY, N.A.

Lipids. Part 27: Synthesis of  $\alpha$ , and  $\beta$ -chimyldipalmitates.  
Zhur. org. khim. 1 no.4:630-634 Ap. '65. (MIRA 18:11)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni  
Lomonosova.

FEDDER, N.L.; ~~TEVILIN, V.M.~~; GRIKITS, E. Ya. [Orlovskiy, E.]

Experience with the use of diethylmalonate in aerosol cylinders.  
Med. parazit. i parazit. bol. 33 no.1:61-63 Ja-P '64 (MIRA 18:1)

1. Ispytaniya nauchno-issledovatel'skiy dozinfektatsionnyy institut (direktor - prof. V.I. Vashkov) Ministerstva zdravookhraneniya SSSR, Moskva, i zavod "Dzintars", Riga.

TSETLIN, Vitaliy Matveyevich; VIL'KOVICH, Vladimir Abramovich;  
KARON, I.I., red.

[Physicochemical factors of disinfection] Fiziko-khimicheskie faktory dezinfektsii. Moskva, Meditsina, 1965. 235 p.  
(MIRA 18:5)

ACC NR: AP6031637 (A) SOURCE CODE: UR/0240/66/000/009/0015/0017

AUTHOR: Vashkov, V. I.; Volkova, A. P.; Tsetlin, V. M.; Yankovskiy, E. Ya.

ORG: Central Scientific Research Disinfectant Institute, Moscow (Tsentral'nyy nauchno-issledovatel'skiy dezinfektsionnyy institut); Central Design Bureau for the Chemical and Silicate-Ceramic Industry, Riga (Tsentral'noye konstruktorskoye byuro khimicheskoy i silikatno-keramicheskoy promyshlennosti)

TITLE: Evaluation of the use of DDVP in an insecticide mixture

SOURCE: Gigiyena i sanitariya, no. 9, 1966, 15-17

TOPIC TAGS: insecticide, DDVP, pesticide, aerosol, cholinesterase activity, *toxicity*

ABSTRACT: The toxicity of 82.5%, 92.12% and 99.46% DDVP mixtures was tested on cats, rabbits, rats and mice enclosed in an aerosol chamber and exposed to aerosols with a density of 1 g/ml and a particle size of approximately 5  $\mu$ . The experiments were continued for 10 to 40 days and lasted about 2 hr each. Inhalation was less toxic than ingestion in nearly all cases: at an estimated concentration of 15—18 mg/m<sup>3</sup> of air the compound produced no observable toxic effects over the entire 10—40 day period.

[WA-50; CBE No. 12]

SUB CODE: 06/ SUBM DATE: 24Feb66/

Card 1/1

UDC: 614.449.57:[614.484:615.778.3



ACC NR: AP6031637

(A)

SOURCE CODE: UR/0240/66/000/009/0015/0017

AUTHOR: Vashkov, V. I.; Volkova, A. P.; Tsetlin, V. M.; Yankovskiy, E. Ya.

ORG: Central Scientific Research Disinfectant Institute, Moscow (Tsentral'nyy nauchno-issledovatel'skiy dezinfektsionnyy institut); Central Design Bureau for the Chemical and Silicate-Ceramic Industry, Riga (Tsentral'noye konstruktorskoye byuro khimicheskoy i silikatno-keramicheskoy promyshlennosti)

TITLE: Evaluation of the use of DDVP in an insecticide mixture

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[WA-50; CBE No. 12]

SUB CODE: 06/ SUBM DATE: 24Feb66/

Card 1/1

UDC: 614.449.57:[614.484:615.778.3

136-58-3-14/ 21

AUTHORS: Tsetlin, V.M. and Tsedilin, S.A.

TITLE: A sonic siren for dust catching (Zvukovaya sirena dlya pyleulavlieniya)

PERIODICAL: Tsvetnyye Metally, 1958, Nr.3. pp. 76-78 (USSR)

ABSTRACT: The very finely divided sublimates arising in non-ferrous metals production are difficult to trap. The coagulation of such particles is assisted by sonic vibrations and the authors describe a siren for this purpose designed, built and tested in Gintsvetmet. The working parts of the siren (fig.1) have 75 circular holes with their centres on a circle of 200 mm diameter. The siren consists of two halves (the casing and the stator), which facilitates its assembly and control of gaps between the working parts. The authors discuss the choice of hole diameter and shape of gas passages: rotor holes are made 0.3 mm less in diameter than the 4.2 mm diameter stator holes, and the latter are conical with the larger diameter 7.2 mm. The axial gap between rotor and stator is less than 0.05 mm. Pressure drop and noise intensity are plotted (figs. 2 & 3) against air flow (30-500 nm<sup>3</sup>/hour). The frequency generated is 3 kilohertz. There are 3 figures.

ASSOCIATION: Gintsvetmet

AVAILABLE: Library of Congress.

1. Sound-Applications 2. Dust-Effects of sonic vibrations

3. Sonic vibrations-Applications

Card 1/1

LEYZEROVICH, Grigoriy Yakovlevich; BABINA, Irina Vladimirovna;  
SEREBRENNIKOVA, Esfir' Yakovlevna; CHUMAK, Z.V., inzh.,  
retsensent; POPOV, N.A., inzh., retsensent; TSETLIN, V.M.,  
red.; MISHARINA, K.D., red.izd-va; ISLENT'YEVA, P.G.,  
tekhn.red.

[Roasting zinc concentrates in a fluidized bed] Obzhig  
tsinkovykh kontsentrats v kipiashchem sloe. Pod red.  
Leizerovicha. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po  
chernoi i tsvetnoi metallurgii, 1959. 222 p. (MIRA 12:8)  
(Zinc--Metallurgy)

6,8000 (and 1063, 1155)

20238

S/046/61/007/001/009/015  
B104/B204

AUTHORS: Tsedilin, S. A., Tsetlin, V. M.

TITLE: Siren for acoustic coagulation of aerosols

PERIODICAL: Akusticheskiy zhurnal, v. 7, no. 1, 1961, 78-86

TEXT: The siren described was developed and tested by the Institute mentioned under Association. It is an axial sound generator, which is smaller and of simpler structure than radial sound generators, and requires no parabolic reflector. The fundamental frequency of the sound produced is 6-7 kc, and the intensity depends on the passage of air. Stator and rotor are circular and have 75 openings with a diameter of 3.9 mm on a pitch diameter of 200 mm. Fig. 1 shows a section of this siren. The ground rotor consists of an aluminum body, onto which a steel disk with 75 openings is screwed. As may be seen from Fig. 1, air inlet 1 and stator 2 of the system are detachably connected, which is of advantage especially for adjusting the air gap between rotor and stator. As may be seen from close investigations of this siren, the aerodynamic resistance of the siren itself is not great at the given working conditions. It follows herefrom that a decrease

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S/046/61/007/001/009/015  
B104/B204

Siren for acoustic ...

of the aerodynamic resistance in the air supply of the siren increases the efficiency of these sirens. For measuring the sound intensity, the effective sound pressure was experimentally determined. In Fig. 3, the intensity  $I$  and the logarithmic level  $L$  are graphically represented as a function of the radius. Further, it follows from the measurements that the direction diagram of the siren depends considerably on frequency. Measured results concerning the acoustic efficiency are given in Table 3, where the efficiency was calculated by means of formula  $\eta = N/QR$ , where  $N$  is the acoustic efficiency of the siren,  $Q$  is the air consumption, and  $R$  the aerodynamic resistance. Close investigations carried out on a coagulation chamber having a length of 10.9 m and a diameter of 610 mm, which was erected in a perpendicular position, were carried out. As sound insulation, a 100 mm thick layer of slag was used. During the experiment, the coagulation chamber was open at the bottom, while the siren was on top. In Fig. 7,  $L$  and  $I$  are graphically represented as function of the radius (as in Fig. 3), measured at a distance of 5.45 m from the mouth of the siren. As subsequently stated, the siren described meets the demands made on it. There are 7 figures, 6 tables, and 2 Soviet-bloc references.

Card 2/6

-20238

S/046/61/007/001/009/015  
B104/B204

Siren for acoustic ...

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy institut tsvetnykh  
metallov Moskva (State Scientific Research Institute of  
Nonferrous Metals, Moscow)

SUBMITTED: April 19, 1960

Legend to Fig. 1: 1) Mouth; 2) stator;  
10) rotor. (For Fig. 1 see card 6 of 6)

| 1        | 2             | 3       | 4       | 5       | 6          | 1        | 2             | 3       | 4       | 5       | 6          |
|----------|---------------|---------|---------|---------|------------|----------|---------------|---------|---------|---------|------------|
| $f, kHz$ | $Q, mm^2/sec$ | $L, db$ | $N, cm$ | $N, cm$ | $\eta, \%$ | $f, kHz$ | $Q, mm^2/sec$ | $L, db$ | $N, cm$ | $N, cm$ | $\eta, \%$ |
| 1,5      | 79            | 146,6   | 14,9    | 675     | 14,0       | 4,5      | 73            | 147,2   | 17,1    | 855     | 14,6       |
| 1,5      | 117           | 149,7   | 30,4    | 921     | 10,6       | 4,5      | 107           | 152,6   | 59,2    | 1975    | 18,3       |
| 1,5      | 168           | 155,7   | 121,0   | 2575    | 18,4       | 4,5      | 157           | 158,9   | 253,0   | 5750    | 29,0       |
| 1,5      | 193           | 158,6   | 235,0   | 4360    | 22,4       | 4,5      | 165           | 160,1   | 333,0   | 7240    | 35,4       |
| 3,0      | 66            | 147,8   | 13,2    | 734     | 18,0       | 7,2      | 67            | 148,6   | 12,0    | 631     | 16,8       |
| 3,0      | 114           | 152,8   | 41,7    | 1305    | 15,0       | 7,2      | 125           | 156,0   | 65,7    | 1880    | 20,4       |
| 3,0      | 161           | 157,7   | 129,0   | 2870    | 20,4       | 7,2      | 155           | 160,3   | 177,0   | 4120    | 25,4       |
| 3,0      | 182           | 159,2   | 182,0   | 3570    | 20,4       | 7,2      | 169           | 162,3   | 280,0   | 5960    | 31,0       |

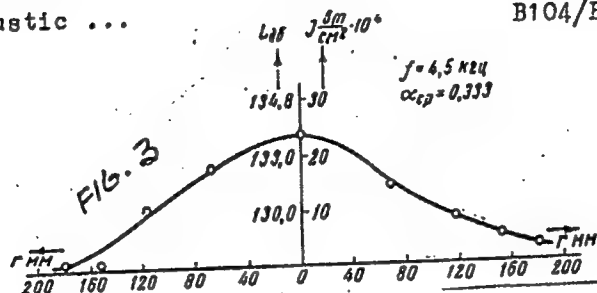
Card 3/6

TABLE 3

20238

Siren for acoustic ...

S/046/61/007/001/009/015  
B104/B204



Legend to Fig. 3: Sound intensity  $I$  (watts per  $\text{cm}^2$ ) and logarithmic sound gauge  $L$  (decibel) as a function of the radius of the mouth at a frequency of 4.5 ko.

Legend to Table 3: 1) Frequency; 2) air consumption in normal cubic meters per hr; 3) sound gauge  $L$  in decibel; 4) efficiency in watts; 5) efficiency/air consumption; 6) efficiency.

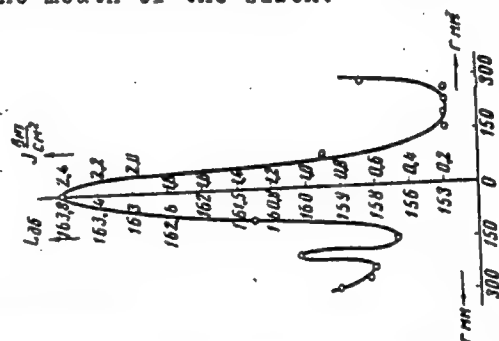
Card 4/6

20238

Siren for acoustic ...

S/046/61/007/001/009/C15  
B104/B204

Legend to Fig. 7: L and I as a function of the diameter of the coagulation tube at a distance of 5.45 m from the mouth of the siren.



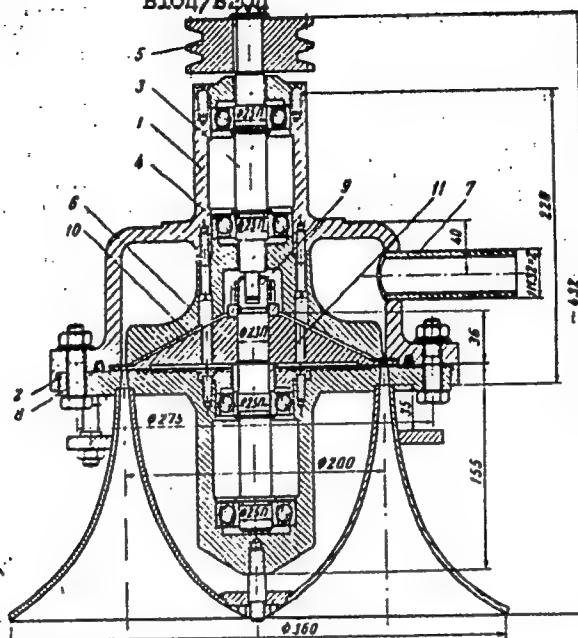
Card 5/6



20238

Siren for acoustic ...

S/046/61/007/001/009/015  
B104/B204



Card 6/6

Fig 1

TSEDILIN, S.A.; TSETLIN, V.M.

Siren for the acoustical coagulation of aerosols. Akust. zhur. 7  
no.1:78-86 '61. (MIRA 14:4)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut tsvetnykh  
metallov, Moskva. (Aerosols) (Coagulation)

SOV/136-59-7-5/20

AUTHORS: Voskresenskiy, P.I., Gordon, G.M., Tsetlin, V.M.

TITLE: Dust Catching in Experimental-Production Electrothermic  
Furnaces with Gas-Tight Charging Gear

PERIODICAL: Tsvetnyye metally, 1959, Nr 7, pp 23-30 (USSR)

ABSTRACT: In recent years the advantages of electrothermic processes have led to their adoption at several Soviet works. But there is little published data on gas cleaning for the conditions of such processes: low flow of explosive and toxic gas with several hundred g of zinc and lead dust per m<sup>3</sup>. The authors describe their investigation of gas cleaning systems at two works. Ye. N. Belyayev and V.N. Tsessarskiy of Gintsvetmet, and A.A. Darchiyev and T.F. D'yachenko of the Belovskiy tsinkovyy zavod (Belov Zinc Works) participated in the work. At the Irtysh works the installation has been modified on the advice of Gintsvetmet and now consists (Fig 1) of a dust chamber, inertia-type dust catcher, scrubber and air ejector. A floating-screw conveyor is used (Fig 2) for removing dust

Card 1/3

SOV/136-59-7-5/20

Dust Catching in Experimental Production Electrothermic Furnaces  
with Gas-Tight Charging Gear

from the chamber. At the Belovo Zinc Works there is one system (Fig 3) for metallic-zinc production by condensation from the liquid phase including an inertia-type dust catcher provided with a type I-85 electromagnetic vibrator and a scrubber with a two-bath settler. For zinc-dust production the system (Fig 4) consists of two vertical bunker-condensers in parallel with tangential gas entry, an inertia-type dust catcher and a scrubber. In the experiments gas flow rates were calculated from the CO + CO<sub>2</sub> content together with the weights of coke used or zinc distilled; checks were made with an anemometer. The systems studied involve long scrubber gas transit-times with high spray rates and efficiencies of 98.2-99.9%. The dust catchers (Table 2) at the Irtysh works operated at 57.0% efficiency, those at the Belovo works at 83.1 (condensation) and 80.2% (powder). The authors note that inlet-dust mean equivalent diameter data, obtained with Tovarov's apparatus fail to indicate actual behaviour since intense coagulation occurs in dust-catching systems.

Card 2/3

SOV/136-59-7-5/20

Dust Catching in Experimental Production Electrothermic Furnaces  
with Gas-Tight Charging Gear

They recommend extension to gas cleaning at the Belovo works and state that the use of inertia-type dust catchers at the Irtysh works has given a 60-% reduction in the dust precipitated in the scrubbers. There are 4 figures, 2 tables and 6 references, 5 of which are Soviet and 1 English.

ASSOCIATION: Gintsvetmet

Card 3/3

GORDON, Grigoriy Mikhaylovich; PEYSAKHOV, Isaak Leybovich; TSEYDLER,  
A.A., prof., doktor, retsenzent; AVROV, V.G., inzh., retsenzent;  
~~TSETLIN, Ye.M., red.~~; APKHANGEL'SKAYA, M.S., red. izd-va;  
VAYNSHTEYN, Ye.B., tekhn.red.

[Dust collection and gas purification] Pyleulavlivanie i  
ochistka gazov. Moskva, Gos. nauchno-tekhn.izd-vo lit-ry po  
chernoi i tsvetnoi metallurgii, 1958. 291 p. (MIRA 12:1)  
(Gas purification) (Dust--Removal)

TSETLIN, V.M.; PROKOF'YEVA, N.B., redaktor; TRUSOV, N.S., tekhnicheskii redaktor.

[Acoustic coagulation of aerosols and its technical application]  
Akusticheskaya koagulyatsiya aerozolei i ee tekhnicheskoe primeneniye.  
Moskva, M-vo. tsvetnoi metallurgii SSSR, 1957. 55 p. (MIRA 10:11)  
(Aerosols) (Ultrasonic coagulation)

TSETLIN, V.M., kand.khim..nauk; REYSAKHOV, I.L., kand.tekhn.nauk

Homogram enabling to determine the speed of floating of dust particles  
in the Stokes' field at various temperatures of the air. TSvet. met.  
33 no.11:42-44 N '60. (MIRA 13:11)

(Fly ash)



TSETLIN, V.M.; DENISOV, V.F.; TSEDILIN, S.A.; Primali uchastiye:  
SASIN, V.I., mladshiy nauchnyy sotrudnik; GUDIN, B.S., master;  
DRACHEVA, T.V., laborantka; OL'KOV, V.T., laborant;  
SLOVIKOVSKIY, A.A., laborant

Investigating the effect of various factors on the process of  
nonferrous metal dust coagulation in a sound field. Sbor.  
nauch. trud. Gintsvetmeta no.19:595-607 '62.

(MIRA 16:7)

(Nonferrous metals--Metallurgy) (Aerosols)  
(Sound waves--Industrial applications)

VOSKRESENSKIY, P.I.; GORDON, G.M.; TSETLIN, V.M.; Prinimali uchastiye:  
BELIYAYEV, Ye.N., master; TSESSARSKIY, V.N., laborant; DARCHIYEV,  
A.A., master; D'YACHENKO, T.F., laborant

Dust collection at pilot plant electrothermal furnaces with  
air-tight charging arrangements. Sbor. nauch. trud. Gintsvetmeta  
no.18:187-198 '61. (MIRA 16:7)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut tsvetnykh  
metallov (for Belyayev, Tseessarskiy). 2. Belovskiyy tsinkovyy  
zavod (for Darchiyev, D'yachenko).  
(Electric furnaces—Equipment and supplies)  
(Dust collectors)

TSETLIN, V.Z.

Evaluating the plasticity of heat-resistant alloys during rupture.  
Zav. lab. 25 no.1:87-90 '59. (MIRA 12:1)

1. Tsentral'nyy nauchno-issledovatel'skiy institut tekhnologii i  
mashinostroyeniya.  
(Heat-resistant alloys--Testing) (Plasticity)

TSETNARSKIY, I.A., inzh.; PONOMARENKO, Yu.F., kand.tekhn.nauk.

Testing single-stage turbine transformers on stands. Vest.mash.  
37 no.12:60-63 D '57. (MIRA 10:12)  
(Hydraulic machinery)

Tsetnarskiy, I. A.

USSR/ Engineering - Expansion clutches

Card 1/1      Pub. 128 - 6/33

Authors      :    Tsetnarskiy, I. A.

Title        :    Bench tests of expansion turbine clutches

Periodical   :    Vest. mash. 36/1, 20-22, Jan 1956

Abstract     :    Bench tests of a turbine clutch designed and constructed by the All-Union Scientific Research Institute for Construction of Road Machinery, are described. Test results regarding the operational characteristics of the clutch at various adjustments of the expansion disks and the number of r.p.m. of a drive shaft, are given. Three USSR references (1951-1954). Drawing; table; diagrams.

Institution :    .....

Submitted   :    .....

*Tsetnarskiy, I. A.*

AID P - 4248

Subject : USSR/Engineering

Card 1/1 Pub. 128 - 6/33

Author : Tsetnarskiy, I. A., Engineer

Title : Stand testing of turbo clutches with expansion  
disengaging wheels.

Periodical : Vest. mash., #1, p. 20-22, Ja 1956

Abstract : Design of hydraulic turbo-couplings regulated by a  
changeable clearance play between wheels is shown and  
the results of tests are given. Diagram, charts,  
3 references (1951-1954).

Institution : None

Submitted : No date

75 10041701 001  
SHMAROV, Nikolay Aleksandrovich; TSETNARSKIY, I.A., otvetstvennyy redaktor;  
ARZAMASOV, N.A., redaktor izdatel'stva; KUROVENKOVA, Z.A., tekhnicheskii redaktor; PROZOROVSKAYA, V.L., tekhnicheskii redaktor

[Mechanization of mining] Mekhanizatsiia gornyykh rabot. Moskva,  
Ugletekhizdat, 1957. 341 p. (MLBA 10:8)  
(Coal mining machinery)

TSETNARSKIY, I.A., inzhener.

~~SECRET~~  
Bench testing of turbine expansion clutches. Vest.mash. 36 no.1:  
20-22 Ja '56. (MLRA 9:3)

(Clutches (Machinery)--Testing)



TSETNARSKIY, I.A., inzh.

Use of safety turboclutches in the transmission systems of KLTs-LP  
conveyers. Ugol' Ukr. 5 no.11:40 N '61. (MIRA 14:11)

1. Institut gornogo dela imeni A.A.Skochinskogo.  
(Conveying machinery) (Turbomachines)

TEKHMISHCHYAN, Azat Vagramevich, kand. tekhn. nauk; TSETNARSKIY, Igor'  
Aleksandrovich, inzh.; KAZANSKIY, Anatoliy Sergeyevich, kand. tekhn.  
nauk; SEMENOV, Vladimir Mikhaylovich, kand. tekhn. nauk; KORABLEV,  
Anatoliy Aleksandrovich, kand. tekhn. nauk; SEMENOV, I.B., otv. red.;  
ABARBAROV, F.I., red. izd-va; IL'INSKAYA, G.M., tekhn. red.

[Mining machinery] Gornaya mekhanika. Moskva, Gos. nauchno-tekhn.  
izd-vo lit-ry po gornomu delu, 1961. 291 p. (MIRA 14:6)  
(Coal mining machinery)

SMORODIN, Sergey Semenovich; TSETNARSKIY, I.A., otv. red.; D'YAKOVA,  
G.B., red.izd-va; LOMILINA, L.N., tekhn. red.; MAKSIMOVA,  
V.V., tekhn. red.

[Mine air-duct networks] Rudnichnye vozdukhoprovodnye seti.  
Moskva, Gosgortekhnizdat, 1963. 156 p. (MIRA 16:8)  
(Mine ventilation)

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Efficiency of using a hydraulic transmission in the drive of a  
rotary bucket excavator. Nauch. soob. IGD 17:114-120 '62.  
(MIRA 16:7)

(Excavating machinery--Hydraulic drive)

1. ТРЕТОВ, ЯА.
2. USSR (600)
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Zhur. ush., nos. i gorl. bol. 21 no.3:64 My-Je '61. (MIRA 14:6)

1. Iz kafedry bolezney ukha, gorla i nosa (zav. - prof. I.M.Sobol')  
Stavropol'skogo meditsinskogo instituta.  
(OTOLARYNGOLOGY—EQUIPMENT AND SUPPLIES)

TSETSARSKIY, B. M.

Change in the mobility of the lingual taste buds in various ear diseases. Vest. otorin. no.5:25-29 '61. (MIRA 14:12)

1. Iz kliniki bolezney ukha, nosa i gorla (zav. - prof. I. M. Sobol') Stavropol'skogo meditsinskogo instituta.

(TASTE) (EAR—DISEASES)

TSETSARSKIY, B.M.

Changes in the ENT area during the influenza outbreak of  
1959. Vest.otorin. 22 no.2:70-74 Mr-Apr '60.

(MIRA 13:12)

1. Iz kliniki bolezney ukha, gorla i nosa (zav. - prof.I.M.Sobol')  
Stavropol'skogo meditsinskogo instituta.

(INFLUENZA pathol.)

(OTORHINOLARYNGOLOGY pathol.)



TSETSARSKIY, B.M.

Course of the wound process in the middle ear in animals  
subjected to X-ray irradiation. Vest.qtorin. 24 no.6:  
63-69 N-D'62. (MIRA 16:7)

1. Iz kafedry Otorinolaringologicheskikh bolezney (zav. - prof.  
I.M. Sobol') Stavropol'skogo meditsinskogo instituta.  
(RADIATION SICKNESS) (EAR--DISEASES)

TSETSERSKIY, A. I.

PA 20/49T35

USSR/Electricity  
Telegraphy  
Telegraph Equipment

Oct 48

"First Results of Program for Studying Supplementary Skills," A. I. Tsetserskiy, Head Economist, Minsk Teleg Office, 1 p

"Vest Svyazi - Elektrosvyaz'" No. 10

Each shift undertakes to train a certain number of operators per year, e.g., first shift will teach T-15 system to 20 Bodo operators, and Bodo apparatus to 16 teletypists. A total of 72 telegraphers are acquiring supplementary skills at Minsk office.

FDB

20/49T35

TSITSWINSKIY, L.M.

Ural Mountain vertebrates which affect the life of the Siberian pine.  
Trudy Inst.biol. UFAN SSSR no.6:145-155 '55. (MLBA 9:2)

(Ural Mountain region--Forest ecology) (Ural Mountain region--Cedar)

ARIFOV, U. A., BARNOV, V. A., GUMANSKIY, G. A., KLEYN, G. A., PASHINSKIY, S. Z.,  
TKHELIDZE, L. M., TSETSKHLADZE, T. V., CHKHEIDUE, T. H., and SHEKOV, S. N.

"Treatment of Silkworm Cocoons by Radiation,"

paper to be presented at 2nd UN Intl'. Conf. on the peace uses of Atomic  
Energy, Geneva, 1 - 13 Sept. 58.

TSETSEVINSKIY, L.N.

All-purpose lathe for the manufacture of wooden parts. Der. prom.  
10 no.2:23-24 F '61. (MIRA 14:3)  
(Woodworking machinery)

TSETSEVINSKIY, L.H.

Mechanizing the mortising of hinge seats and the finishing of door  
and window units. Der. prom. 7 no. 5:25-26 My '58. (MIRA 11:7)  
(Woodworking machinery)  
(Doors)  
(Windows)

TSETSIKOVSKIY, V. M.

"Elements of the Theory of Separating Grain Mixtures." Sub 30  
Juh 47, Moscow Technological Inst of the Food Industry.

(Cand Tech Sci)  
Dissertations presented for degrees in science and engineering in  
Moscow in 1947.

SO: Sum. No. 457, 18 Apr 55

TSET SINOVSKIY, V. M.

Tsetsinovskiy, V. M. - "The problems of designing bins for the cleaning departments of the mills", Trudy Vsesoyuz. nauch.-issled. in-ta zerna i produktov ego pererabotki, Issue 16, 1949, p. 166-82.

SO: U-4110, 17 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 12, 1949).



AUTHOR : Tsotsinovskiy, V.M.  
 INSTIT. : All-Union Sci.Res.Inst. of Grain and Its Pro-  
 TITLE : Systems and Technological Schemes for Calib-  
 rating Corn Seeds at the Cereal Grading Points.

ORIGIN. PUB.: Sootsahch. i ref. Vses. n.-i. in-4s zerna i  
 produktov yego pererabotki, 1957, vyp. 4, 8-13

SUMMARY : On the basis of investigation on the forms  
 of grain sections and distribution of large  
 grains along the length of the cob in the  
 most widely distributed varieties VIR-42,  
 Arasnoderskaya 1/49 and Sterling, a correla-  
 tion has been established between the dimen-  
 sions of the grains: in seed sorting, for  
 example, by thickness simultaneous sorting  
 by width is also performed within certain  
 limits and with a definite accuracy. While

\*cessed Products

COND: 1/3

Subject :  
Title : Cultivated Plants.  
Source : Ref. Zh. -Biologiya, No. 5, 1959, No. 20258

Author :  
Editor :  
Translator :

ORIN. PCB:

ABSTRACT : studying variation curves, the limits of variation in the fractional sowing group were discovered on the basis of width, thickness and length of the grains. The distinctness of the sowing depends on the number of fractions. However, an increase in the latter raises the expense and complicates the technological process. Basic technological schemes have been worked out for cleaning and calibrating corn seeds in the minimum number

CARD : 2/3

Subject: Cultivated Plants.

Ref. JOL: 401 1950-1951, No. 5, 1950, No. 20250

Author :  
Date :  
Title :

Orig. Pub.:

Ref. JOL: of fractions (4 and 6) possible by existent  
drilling apparatus, adaptable to the Rokit  
calibrating machine. --M.V. Dranishnikov

Card: 3/3

TSITSINOVSKIY, V., kand. tekhn. nauk.

Sizing seed corn at grain procurement stations. Mukh.-elev. prom. 24  
no.4:8-9 Ap '58. (MIRA 11:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zerna i produktov  
yego pererabotki. (Corn (Maize)--Grading)

~~TSETSIKOVSKIY, V.~~, kand.tekhn.nauk; PTUSHKINA, G., nauchnyy sotrudnik;  
BELYAYEV, Ye., nauchnyy sotrudnik

Ways for improving the grading of shelled corn at plants and grain  
procurement points. Muk.-slev. prom. 24 no.9:11-14 S '58.  
(MIRA 11-10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zerna i produktov  
yego pererabotki (for Tsetsinovskiy, Ptushkina). 2. Vsesoyuznyy  
institut sel'skokhozyaystvennogo mashinostroyeniya (for Belyayev).  
(Corn (Maize)--Grading)

KUPRITS, Ya.N., prof. doktor tekhn. nauk; DEMIDOV, P.G., prof.;  
DEMIDOV, A.R., prof. doktor tekhn. nauk; GINZBURG,  
M.Ye., kand. tekhn. nauk, dots.; DROGALIN, K.V., kand.  
tekhn. nauk; NAUMOV, I.A., kand. tekhn. nauk;  
TSETSIKOVSKIY, V.M., kand. tekhn. nauk; TRUNOV, A.F.,  
inzh., retsenzent; KLEYMAN, L.M., red.

[Technology of grain processing; flour, groats and mixed  
feed industries] Tekhnologiya pererabotki zerna; muko-  
mol'noe, krupianoe i kombikormovoe proizvodstvo. Moskva,  
Kolos, 1965. 504 p. (MIRA 18:12)

*TSETSIOROKO-LIMONOVA, A.A.*

TSETSIOROKO-LIMONOVA, A.A.

A case of generalized eruption following revaccination against  
smallpox. Trudy Len.inst.eoid. i mikrobiol. 9:197-201 '47. (MLA 10-2)

1. Iz ospennogo otdela Instituta im. Pastera (zav. otd. A.A.Belyavay)  
(SMALLPOX) (VACCINATION)

TSETSKHLADZE, K. M.

Tsetskhladze, K. M. - "The Tbilisi zoological park, its problems and perspectives,"  
Trudy Tbilis. zooparka, Vol. I, 1948, p. 5-23, - (In Georgian, resume in Russian)

SO: U-1094, 29 Oct 53, (Letopis 'Zhurni 'nykh St. tey, No. 16, 1949).



TSETSKHLADZE, M. I., VEKUA, M. A. and SMIRNOVA, G. P.

"Treatment of Ancylostomiasis With Chenopodium Oil", Med. Paraz. i Paraz. Bolez.,  
Vol. 17, No. 5, pp 434-35, 1948.

TSETSKHLADZE, M.V.

\* TSETSKHLADZE, M.V.--"Curing Ascariasis and Ancylostomiasis with Chenopodium Oil."  
(Dissertation for Degrees in Science and Engineering Defended at USSR Higher  
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SO: Knizhnaya Letopis', No. 25, 18 Jun 1955

\* For Degree of Candidate in Medical Sciences

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Treatment of acute and chronic lumbosacral radiculitis patients  
with baths from the Sukhum mineral water. Soob. AN Gruz. SSR 34  
no.2:493-499 My '64. (MIRA 18:2)

1. Abkhazskiy filial Instituta kurortologii i fizioterapii  
Ministerstva zdravookhraneniya Gruzinskoy SSR. Submitted  
December 4, 1963.

TSETSKHLADZE, N.Ya.

Treatment of patients suffering from lumbosacral radiculitis  
with baths from Sukhumi mineral water borehole. Vop.kur.  
fizioter. i lech. fiz. kul't. 27 no.5:397-401 S-0'62.  
(MIRA 16:9)

1. Iz Abkhazskogo filiala Instituta kurortologii Gruzii  
(dir. - prof. A.L.Grigoliya).  
(SUKHUMI—MINERAL WATERS) (NERVES, SPINAL—DISEASES)

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Защ. 1943, 29.5.
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образования гидроксилов нестойких  
металлов при помощи методов фото-  
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ков. Алб. 1940. 85 с. (Планетарий ин. Гер-  
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Защ. 1940, 27.9.
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лосе количества порошков и бромидов.  
1937. 75 с., 17 тб., 3 вкл. Тр. ТГУ,  
1941 и 1942 гг.).  
Защ. 1939, 31.12.
872. Цицеладзе Асиян Пар-  
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Защ. 1938, 14.5.
875. Чхелеши Аравад За-  
харевич. Кристаллы — элементар-  
ные минералогические. Эсперименталь-  
ное исследование. 1939—1940. [1], 108 с.,  
10 илл. л.
876. Эристави Дмитрий Ио-  
сифович. Влияние излучения на ак-  
тивность катализатора. 1937. 68 с.,  
илл. (Ист. химии ГИАН СССР).  
Защ. 1937, 1.2.

Dissertation for degree of  
Candidate Chemical Sciences

Def. at  
Tbilisi State U.

USSR/Farm Animals - Silkworms.

Q-6

Abs Jour : Ref Zhur - Biol., No 7, 1958, 31054

Author : Kipiyani R.Ya., Tsetshkladze T.V.

Inst : -

Title : Killing the Chrysalides and the Conservation of Cocoons of the Mulberry-Feeding Silkworm by Gamma Irradiation (Zamorivaniye kukolok i konservatsiya kokonov tutovogo shelkopryada gamma-izlucheniym).

Orig Pub : Soobshch. AN GruzSSR, 1956, 17, No 7, 657-662.

Abstract : In the suffocation of chrysalides of the silkworm by hot air or by steam, etc., a decrease of the output of raw silk and a deterioration of the unwinding of cocoons may be observed. In radiation sterilization, the temperature does not rise to a noticeable degree, and therefore the thermal denaturation does not occur. The technology of the radiation sterilization is simple and economically expedient.

Card 1/2

TSETSKHLADZE, T. V.

Tsetskhladze, T. V. - "The properties and stability of certain alco-suspensions derived from the mechanical dispersion of lead," Trudy Tbilis gos. un-ta im. Stalina, Vol. XXXIIIa, 1949, p. 75-83, (In Georgian, resume in Russian), -

Bibliog: 7 items

SO: U-5240, 17, Dec. 53, (Letopis 'Zhurnal 'nykh Statey, No. 25, 1949).

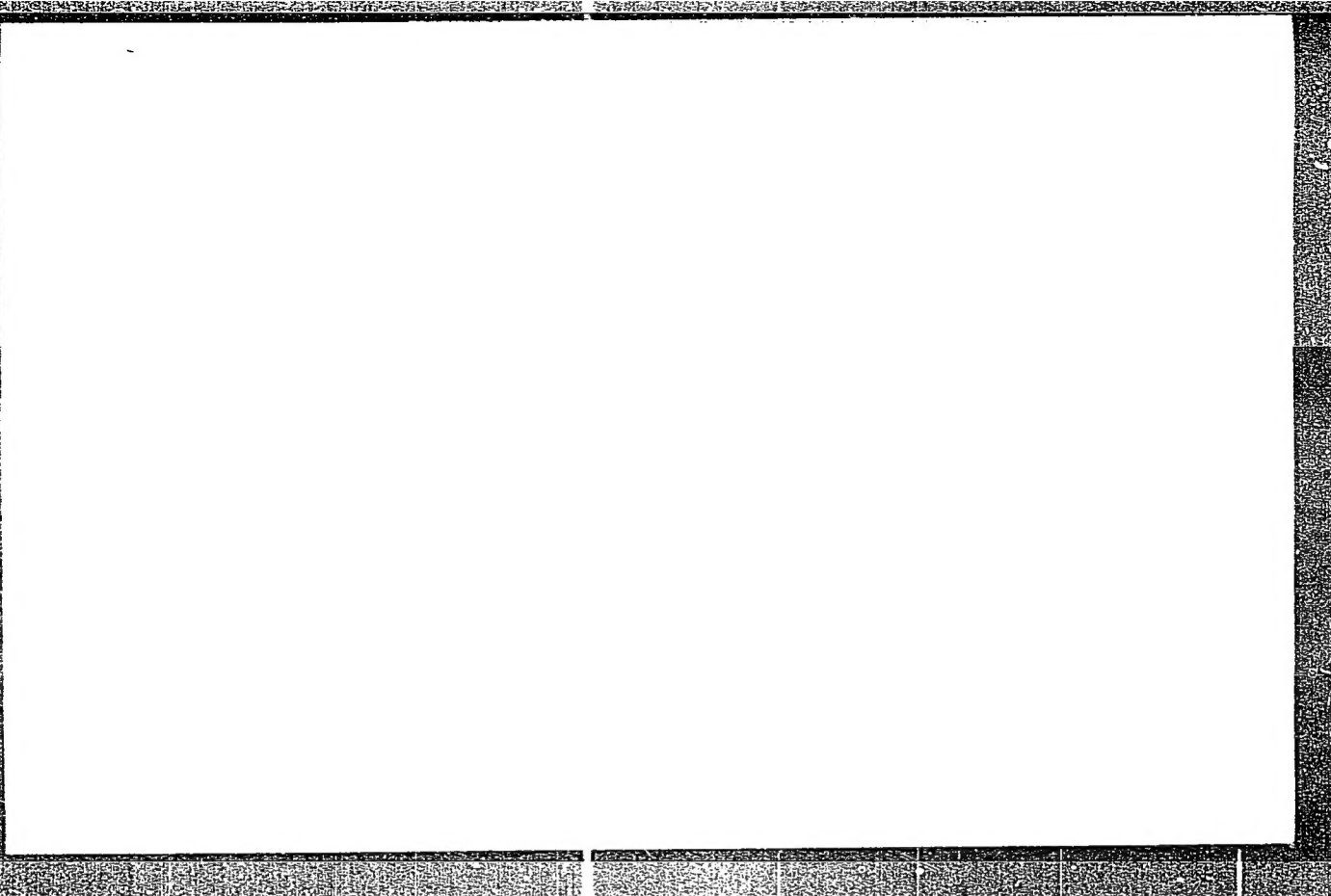
TSETSKHLADZE, T. V.

Tsetskhladze, T. V. and Kokochashvili, V. I. - "The effect of organic matter on the stability of an alco-suspension of oxide compounds of lead," Trudy Tbilis gos. un-ta im. Stalina, Vol. XXVIIIa, 1989, p. 85-88, - Bibliog: 5 items



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**APPROVED FOR RELEASE: 03/14/2001**

**CIA-RDP86-00513R001757010018-1"**

TSETSKHLADZE, T. V.

F-1

USSR/Microbiology. General Microbiology.

Abs Jour: Ref. Zhur.-Biol., No 7, 1958, 28918.

Author : Tsetskhladze, T.V., Kipiani, R. Ya.

Inst : Not given.

Title : Effect of  $\gamma$  -Irradiation on Grape Vines and Brandy Alcohols.

Orig Pub: Deystvie  $\gamma$  -izlucheniya na vinogradnye vina i konyachnye spirty.

Soobshch. AN GruzSSR, 1956, 17, No 4, 303-308.

Abstract: Experiments were conducted on the possibility of speeding-up seasoning of alcoholic beverages by irradiation with gamma-rays from radioactive cobalt ( $Co^{60}$ ). Irradiation of old wines decreases quality; irradiation of young wines (year old), also wines of the Madeira and port type, improves taste properties.

Card : 1/2

USSR/Microbiology. General Microbiology.

F-1

- Abs Jour: Ref. Zhur.-Biol., No 7, 1958, 28918.

Irradiation results in biochemical improvements  
similar to those which are observed in natural sea-  
soning of alcoholic beverages.

16

Card : 2/2

KIPIANI, R.Ya.; TSETSKHLADZE, T.V.

Gamma rays for destroying and conserving the cocoons of silkworm.  
Soob. AN Gruz. SSR 17 no.7:657-662 '56. (MLRA 9:11)

1. Akademiya nauk Gruzinskoy SSR, Institut fiziki, Tbilisi. Predstavleno  
chlenom-korrespondentom Akademii L.P. Kalandadze.  
(Silkworms) (Gamma rays--Physiological effect)